

REMARKS

In the Office Action dated October 12, 2006, claims 1-31 were presented for examination. The Examiner has allowed claims 1-8, 9-16, and 23-27. Claims 17-22 were rejected under 35 U.S.C. §101. Claim 28 was rejected under 35 U.S.C. §103(a) over *Carter et al.*, U.S. Patent No. 5,909,540, in view of *Yeager et al.*, U.S. Patent Publication No. 2005/0086300. Claims 29-31 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Carter et al.*, U.S. Patent No. 5,909,540, in view of *Yeager et al.*, U.S. Patent Publication No. 2005/0086300, and further in view of *Langfahl, Jr.*, U.S. Patent No. 6,031,528.

The following remarks are provided in support of the pending claims and responsive to the Office Action of October 12, 2006 for the pending application.

I. Rejection of claims 17-22 under 35 U.S.C. §101

In the Office Action dated October 12, 2006, the Examiner rejected claims 17-22 as not being directed to statutory embodiments. More specifically, the Examiner raised an issue with the language “a computer readable medium” in claim 17. Applicants have amended claim 17 to incorporate the language as suggested by the Examiner. The amendments to claims 17 remove the issues raised by the Examiner pertaining to non-statutory subject matter. Accordingly, Applicant respectfully requests that the Examiner remove the rejection of claims 17-22 under 35 U.S.C. §101.

II. Rejection of Claim 28 under 35 U.S.C. §103(a)

In the Official Action of October 12, 2006, the Examiner rejected claim 28 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 5,909,540 to *Carter et al.* in view of U.S. Patent Publication No. 2005/0086300 to *Yeager et al.* (hereinafter *Yeager*).

Applicants’ remarks with respect to *Carter et al.* and *Yeager et al.* presented in the Response filed August 1, 2006 are hereby incorporated by reference.

As noted by the Examiner, *Carter et al.* fails to teach a computer cluster configured with a gateway for a network interface. However, it is not merely the configuring of the computer network of *Carter et al.* that is not present in claim 28. It is the element of detecting a heartbeat loss in the cluster with the specified configuration. There is no teaching, suggestion, or motivation within *Carter et al.* to modify the network to employ a gateway therein. For a rejection to stand under 35 U.S.C. §103(a), there must be a teaching, suggestion, or motivation in the references themselves to modify the reference or combine the teachings.¹ The Examiner provides a motivation statement to the effect that the motivation stems from use of a gateway to connect one cluster of nodes with another node or cluster in the network, and employs *Yeager et al.* for this element of the claim not present in *Carter et al.*

The term cluster is a term of art, and is not merely a grouping of nodes in a network. “A cluster is a set of one or more nodes coordinating access to a set of shared storage subsystems typically through a storage area network”² *Yeager et al.* teaches “network nodes” but does not teach that this network of nodes operates as a cluster, as defined by Applicant. More specifically, *Yeager et al.* does not explicitly teach that the process of determining a heartbeat loss in the network of nodes configured as a cluster. The Examiner cited *Yeager et al.* to support the contention that this missing element exists by stating “gateways are used to connect one cluster of nodes with another network.”³ However, gateways are not limited to connecting clusters of nodes in a network. A gateway may be employed with nodes in a network that are not organized in a cluster. There is no teaching in the prior art references of *Carter et al.* and *Yeager et al.* for the elements claimed by Applicants. “To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.”⁴ It is Applicants’ position that the combination of prior art references as asserted by the Examiner does not teach

¹ See MPEP §2143.

² Specification, page 1, lines 11-12.

³ See Office Action dated October 12, 2006, Page 3, paragraph 5.

⁴ MPEP §2143.03 citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

or suggest the elements of Applicants' claim 28. Accordingly, Applicants respectfully request that the Examiner remove the rejection and direct allowance of claim 28.

III. Rejection of Claim 29-31 under 35 U.S.C. §103(a)

The Examiner rejected claims 29-31 under 35 U.S.C. §103(a) as being unpatentable over *Carter et al.* in view of *Yeager et al.* in view of *Langfahl*.

Applicants' remarks with respect to *Carter et al.*, *Yeager et al.*, and *Langfahl* presented in the Response filed August 1, 2006 are hereby incorporated by reference.

As noted above, it is Applicants' position that the combination of *Carter et al.* and *Yeager et al.* do not meet the limitations of claim 28 under 35 U.S.C. §103(a). Furthermore, it is Applicants' position that *Langfahl* does not teach or suggest sending an ICMP echo as a step in validating a heartbeat loss. Although *Langfahl* does discuss a diagnostic tool implemented as an ICMP echo, it does not teach or suggest use of the ICMP echo as a validation tool for a heartbeat loss. As a matter of fact, there is not a single use of the term "heartbeat" present in the *Langfahl* patent. "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."⁵ It is Applicants' position that the combination of prior art references as asserted by the Examiner does not teach or suggest that the validation of the heartbeat is conducted by issuance of an ICMP echo. Accordingly, Applicants respectfully request that the Examiner reconsider this rejection and allow claims 29-31.

IV. Conclusion

Based upon the above remarks, Applicants respectfully request consideration of the claims. It is submitted that all of the claims in the application are in condition for allowance and such action is respectfully requested. Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned

⁵ MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

respectfully requests that she be contacted at the number indicated below.

For the reasons outlined above, an allowance of this application is respectfully requested.

Respectfully submitted,

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